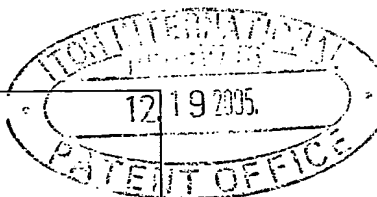


PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY



PCT

To: <div style="text-align: center; padding-top: 20px;">see form PCT/ISA/220</div>	<div style="text-align: center; padding-top: 20px;"> WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) </div> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) </div>
Applicant's or agent's file reference see form PCT/ISA/220	FOR FURTHER ACTION See paragraph 2 below
International application No. PCT/JP2005/011487	International filing date (day/month/year) 16.06.2005
Priority date (day/month/year) 17.06.2004	
International Patent Classification (IPC) or both national classification and IPC G11B20/12, G11B27/32, G11B7/007, G11B19/12	
Applicant RICOH COMAPNY, LTD.	

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA: <div style="text-align: center;"> European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 </div>	Authorized Officer Sucher, R Telephone No. +49 89 2399-2148
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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**International application No.
PCT/JP2005/011487**IAP20 Rec'd PCT/PTO 31 MAR 2006****Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application,
- ☒ claims Nos. 2,3,5-11,13,14,15,18-36

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):
- ☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 1,4,12,15,17,37,38 are so unclear that no meaningful opinion could be formed (*specify*):

see separate sheet

- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☐ no international search report has been established for the whole application or for said claims Nos.
- ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
 - the written form ☐ has not been furnished
 - ☐ does not comply with the standard
 - the computer readable form ☐ has not been furnished
 - ☐ does not comply with the standard
- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.
- ☐ See separate sheet for further details

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2005/011487

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1,4,12,16,17,37,38
Inventive step (IS)	Yes: Claims	
	No: Claims	1,4,12,16,17,37,38
Industrial applicability (IA)	Yes: Claims	1,4,12,16,17,37,38
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

PCT/JP2005/011487

Re Item III**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

Since the independent claims 1, 4, 12 and 17 are not clear (see section V below), no meaningful opinion with regard to novelty, inventive step and industrial applicability of dependent claims 2, 3, 5-11, 13, 14 and 18-36 could be formed.

Re Item V**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: WO 03/105141 A (LG ELECTRONICS INC; SUH, SANG WOON) 18 December 2003;

D2: EP-A-0 715 301 (SONY CORPORATION) 5 June 1996.

2. Claims 1 and 4 do not meet the requirements of Article 6 PCT for the following reasons:

Claims 1 and 4 relate to the same subject-matter and therefore lack conciseness. However, none of said claims provides a complete solution to the underlying problem. According to p. 5 of the description, it is an object of the present invention to provide a rewritable information recording medium having multiple recording layers which can be provided with compatibility to a read-only information recording medium.

Claims 1 and 4 define a rewritable information recording medium having multiple recording layers and using opposite track path addressing, wherein "end recorded area information" including information for identifying an area in the second recording area having data that corresponds to an end position of the second data area can be recorded. With this definition, it is completely unclear how the above-mentioned result can be achieved for the following reason:

Document D2 already discloses (see the passages cited in the Search Report) a read-only multilayer disk using opposite track path addressing, wherein the last address in the program area of each layer is recorded in a management area (see fig. 11, first TOC sector). The document further discloses that the same structure may be used for a recordable disk (see also col. 14, l. 26-33), such that the compatibility is automatically achieved.

Additionally, document D1 discloses a rewritable dual-layer Blu-ray disk using opposite track path addressing (see fig. 4), wherein the "last verified address pointer" (LVA) for each recording layer is stored in the disk definition structure (DDS) of the disk (see fig. 5). The LVA specifies the first physical sector number of the last cluster that has been formatted (see p. 6, l. 2-8 and p. 7, l. 4-12) and therefore corresponds to the end position of a data area in a recording layer according to claims 1 and 4. Without an appropriate clarification, the subject-matter of claims 1 and 4 is therefore not new in the sense of Article 33(2) PCT.

The same objections also apply to claims 12, 16, 17, 37 and 38 defining the corresponding recording method, data structure, recording apparatus, program and computer readable medium.

3. Claim 15 defines a recording method comprising the only step of "recording data for making the information recording medium compatible ... by referring to ..." which attempts to define the subject-matter in terms of the result to be achieved and merely amounts to a statement of the underlying problem (see par. 2 above). Thus, the claim is not clear either (Article 6 PCT).

Re Item VII

Certain defects in the international application

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in document D1 is not mentioned in the description, nor is this document identified therein.

2. The independent claims are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in a preamble and with the remaining features being included in a characterising part.
3. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

Re Item VIII

Certain observations on the international application

see section V above.